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Rhinella mirandaribeiroi (Gallardo, 1965) (Amphibia: Anura: Bufonidae): distribution extension and new state record

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Abstract: *Rhinella mirandaribeiroi* is widely distributed in the Cerrado domain and Cerrado enclaves in the Amazon forest, occurring also at the ecotone between this domain and surrounding formations. Here, we provide the first species record for the state of São Paulo, municipality of São Joaquim da Barra, northeast of the state. Additionally, we also provide a distribution map. This new record fills a gap in the species´ distribution in southeastern Brazil.

Key words: *Rhinella granulosa* species group, São Paulo, Sapucaí-Mirim/Grande River basin, geographic distribution map

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The *Rhinella granulosa* species group currently comprises 13 species: *Rhinella azarai* (Gallardo, 1965); *R. bergi* (Céspedez, 2000 "1999"); *R. bernardoi* Sanabria et al., 2010; *R. centralis* (Narvaes & Rodrigues, 2009); *R. dorbignyi* (Duméril & Bibron, 1841); *R. fernandezae* (Gallardo, 1957); *R. granulosa* (Spix, 1824); *R. humboldti* (Gallardo, 1965); *R. major* (Müller & Helmich, 1936); *R. merianae* Gallardo, 1965; *R. mirandaribeiroi* (Gallardo, 1965); *R. nattereri* Bokermann, 1967; and *R. pygmaea* (Myers & Carvalho, 1952) (Narvaes and Rodrigues 2009; Sanabria et al. 2010). *Rhinella mirandaribeiroi* is widely distributed in the Cerrado domain, occurring in the states of Bahia, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Piauí and Tocantins; in Cerrado enclaves in the states of Amazonas, Pará and Rondônia; and in the Noel Kampf National Park, Santa Cruz, Bolivia (Narvaes and Rodrigues 2009; Valdujo et al. 2009, 2011; Morais et al. 2011; Pinheiro et al. 2012; Melo et al. 2013; Roberto et al. 2013; Frost 2014).

Herein, we present a new record for *R. mirandaribeiroi* in the state of São Paulo, based on four adult males, of which two were collected (collecting permit number 89-2012, provided by the Centro de Manejo de Fauna Silvestre/Departamento de Fauna/Coordenadoria de Biodiversidade e Recursos Naturais/Secretaria do Meio Ambiente do Estado de São Paulo) and housed at the Coleção Célio F. B. Haddad (CFBH 36923: SVL 42.9 mm; CFBH 36924: SVL 43.1 mm). The individuals were observed vocalizing at night on moist soil (Figure 1) on 13 November 2013, in transitional areas between degraded native riparian vegetation (Semideciduous Seasonal Forest, Embaúba Stream) and reforestation areas with native seedlings (Pequena Central Hidrelétrica Anhanguera small hydroelectric power plant reservoir, Sapucaí-Mirim River) (20°30′20.22″ S, 047°52′32.87″ W, 540 m above sea level), located in the municipality of São Joaquim da Barra, in the Sapucaí-Mirim/Grande river basin, northeastern region of the São Paulo state, Brazil.

Figure 1. Male *Rhinella mirandaribeiroi* vocalizing on moist soil on 13 November 2013, at São Joaquim da Barra municipality, São Paulo state, Brazil.

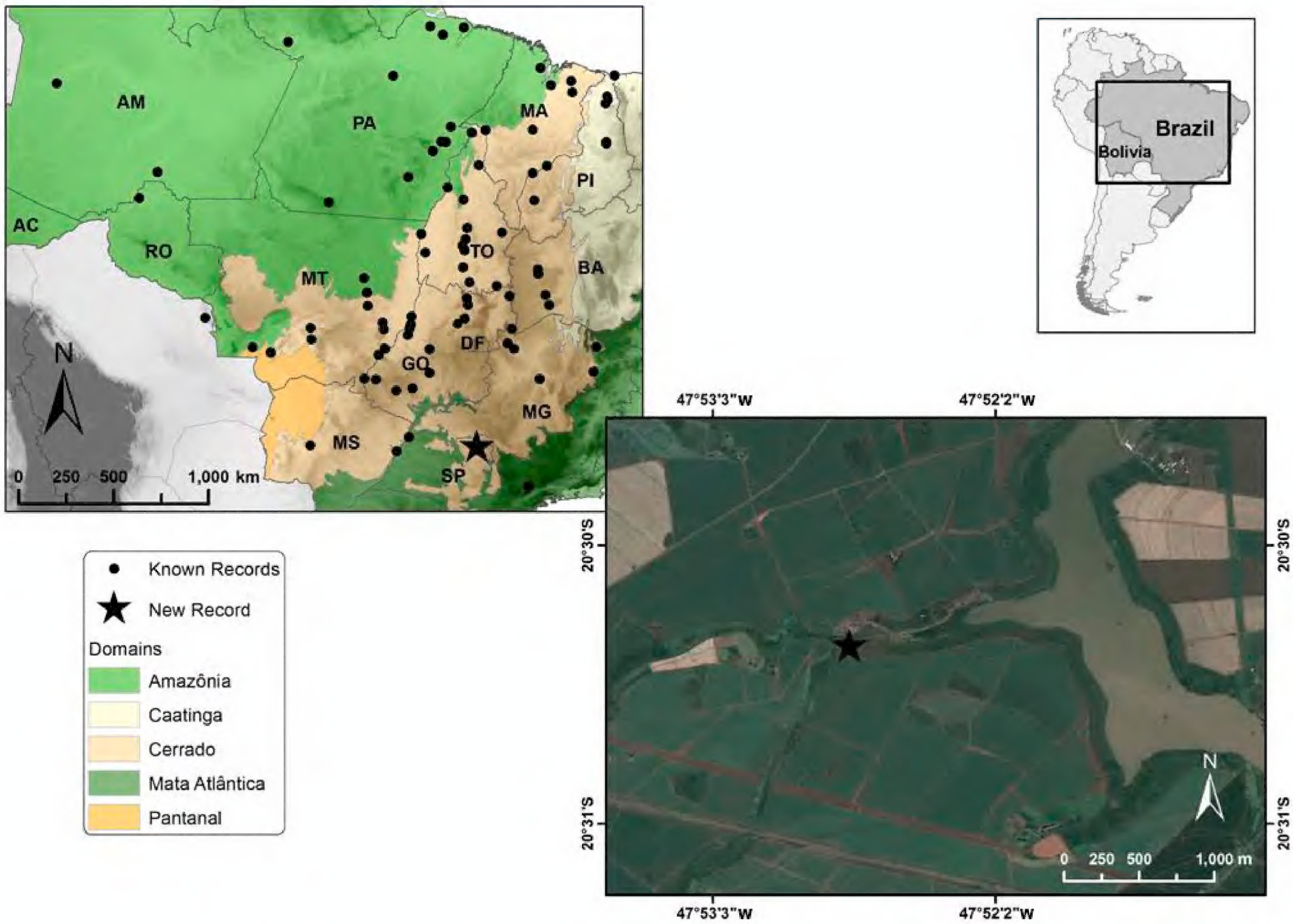

Figure 2. Map showing the known distribution of *Rhinella mirandaribeiroi* in South America: literature records are represented by black circles and new record by black star.

This is the first record of *R. mirandaribeiroi* for the state of São Paulo, which extends the species distribution ca. 330 km northwest from Itajubá, Minas Gerais state (22°25′36.47″ S, 045°27′10.58″ W) and ca. 340 km east from Aparecida do Taboado, Mato Grosso do Sul state (20°05′20.32″ S, 051°06′10.72″ W) (Narvaes and Rodrigues 2009). The distribution map shown in Figure 2 presents 85 localities based on records gathered from literature sources (Narvaes and Rodrigues 2009; Valdujo et al. 2009, 2011; Morais et al. 2011; Pinheiro et al. 2012; Roberto et al. 2013; Melo et al. 2013; Gambale et al. 2014; Vieira et al. 2014) in addition to the new record (star on Figure 2). The species is widely distributed in the Cerrado domain, but also occurs at the ecotone between this domain and surrounding formations, which is the case of the present record at the transition between Cerrado and Atlantic forest.

In the extreme northeastern São Paulo state, the typical natural fragmentation of Seasonal Semideciduous Forest is even more pronounced due to a transition zone or contact between the forested plateau of Western Planalto Paulista and the Cerrado plateau of Triangulo Mineiro and Goiás (Ab'Saber 1968). Although the only conservation unit in the Sapucaí-Mirim/Grande river basin has been sampled recently for anurans (Araujo et al. 2009), resulting in four new records for the state of São Paulo, this forest-savanna mosaic is still considered a geographical sampling gap for amphibians (Rossa-Feres et al. 2011). Rossa-Feres et al. (2008) indicated the region as a priority area for herpetofauna conservation. Currently, great pressures on the riparian forests of the Sapucaí-Mirim River, one of the most important vegetation corridors in the Sapucaí-Mirim/Grande river basin, are represented by fragmentation and habitat loss, caused mainly by expansion of sugar cane plantations and installation of small hydropower plants.

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